

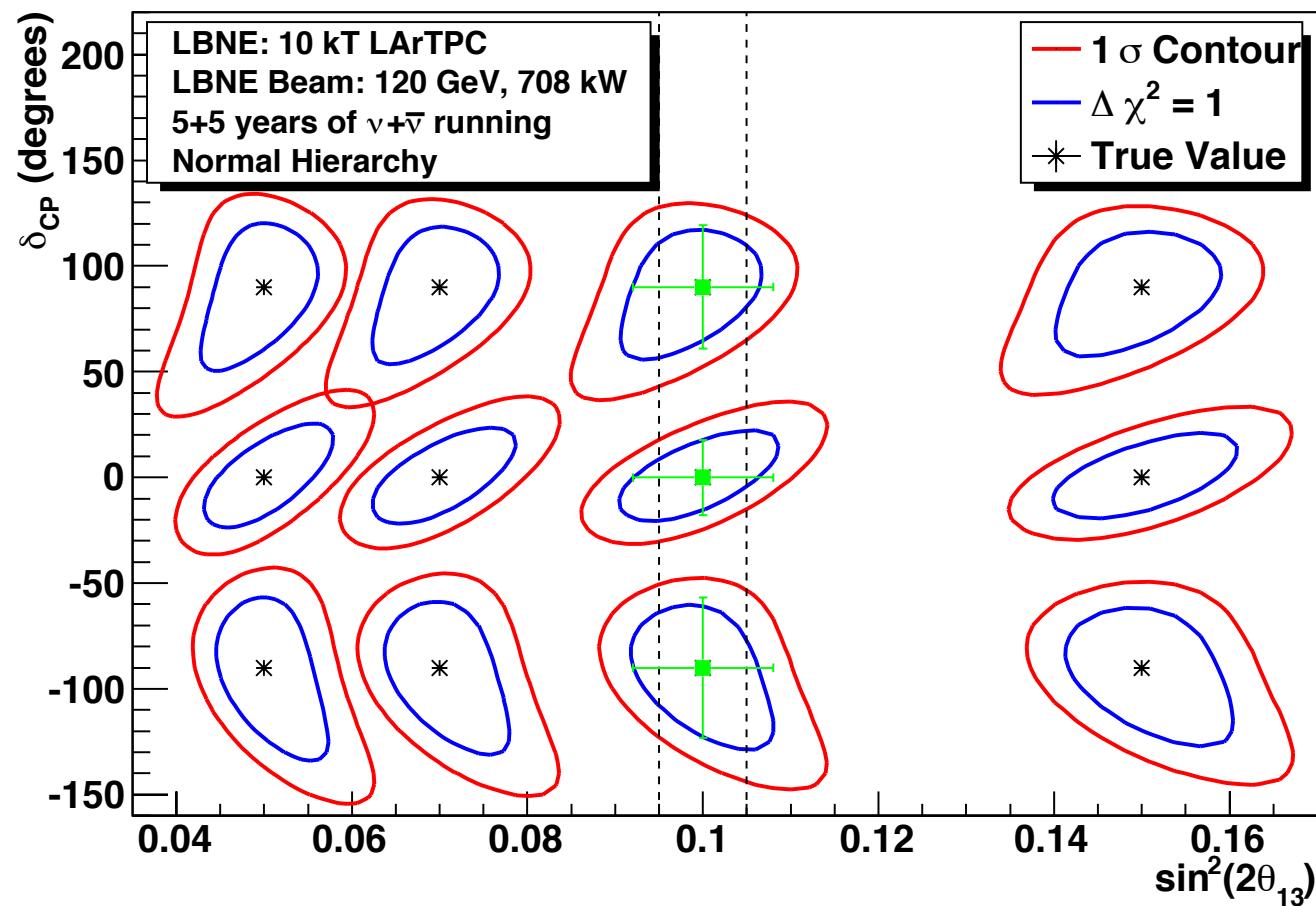
Update of Resolutions and Sensitivities using CDR Beam

Elizabeth Worcester

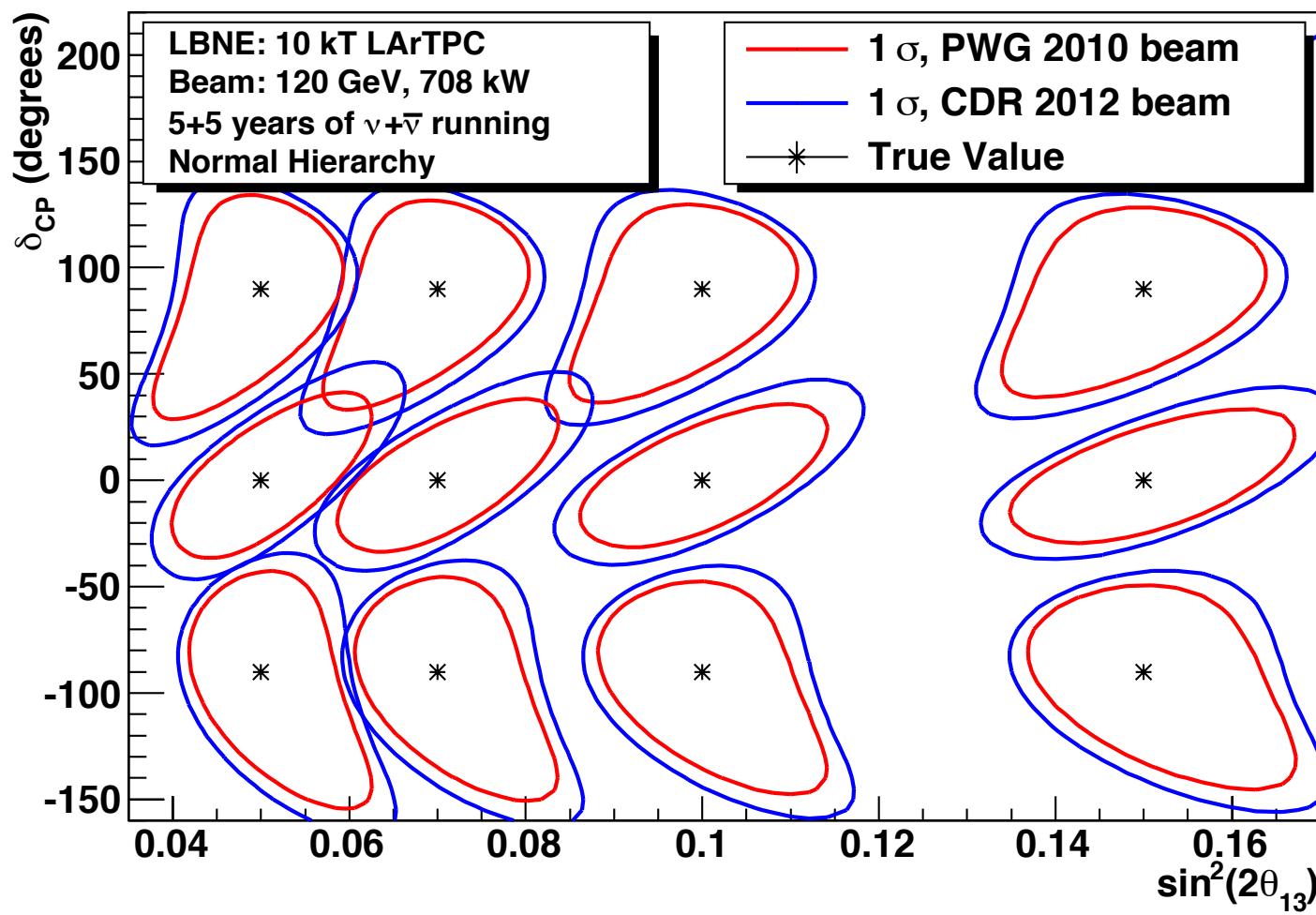
October 1, 2012

Validate 1d vs 2d Resolutions

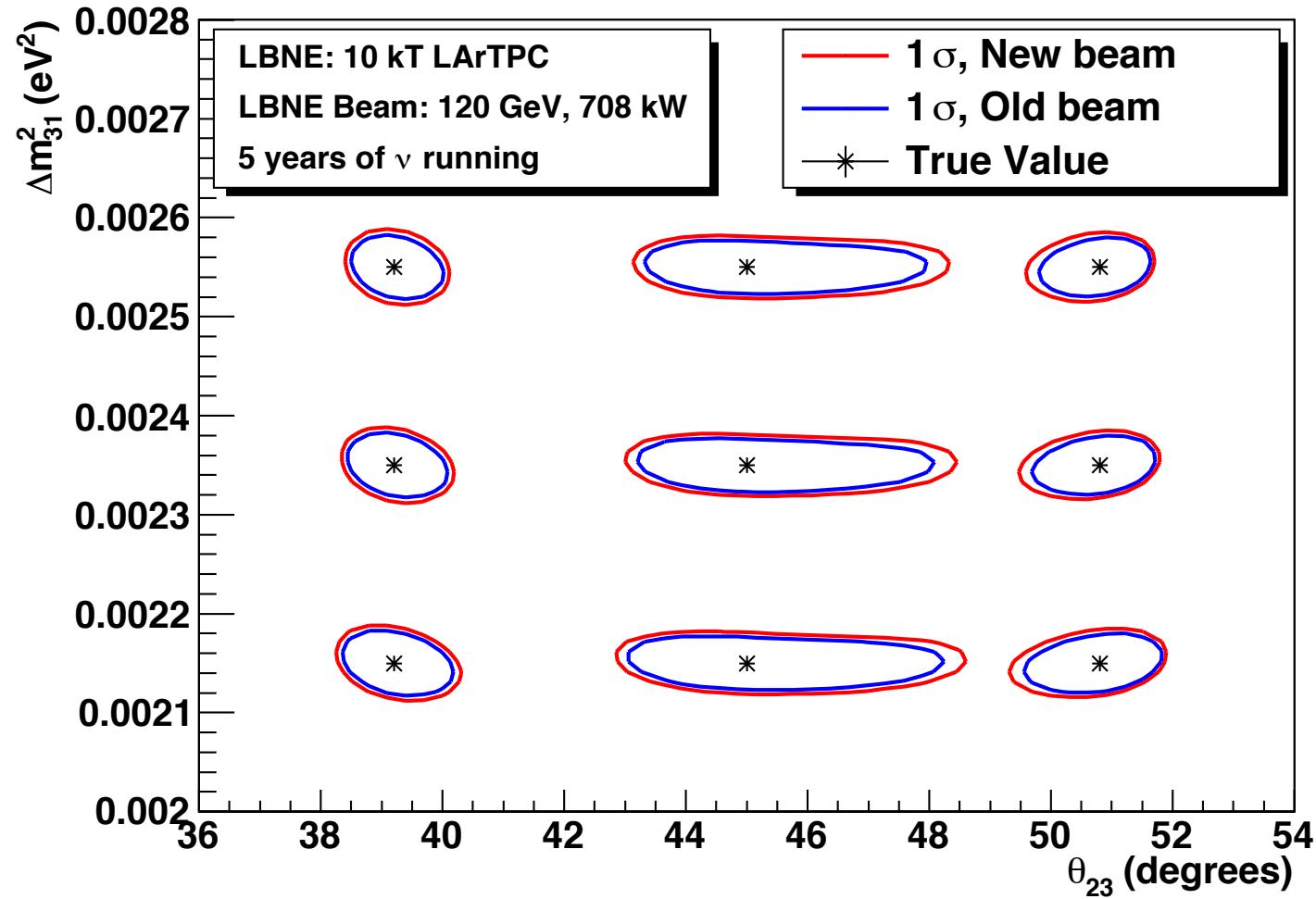
Old beam



Compare Beams: δ_{CP} vs θ_{13}

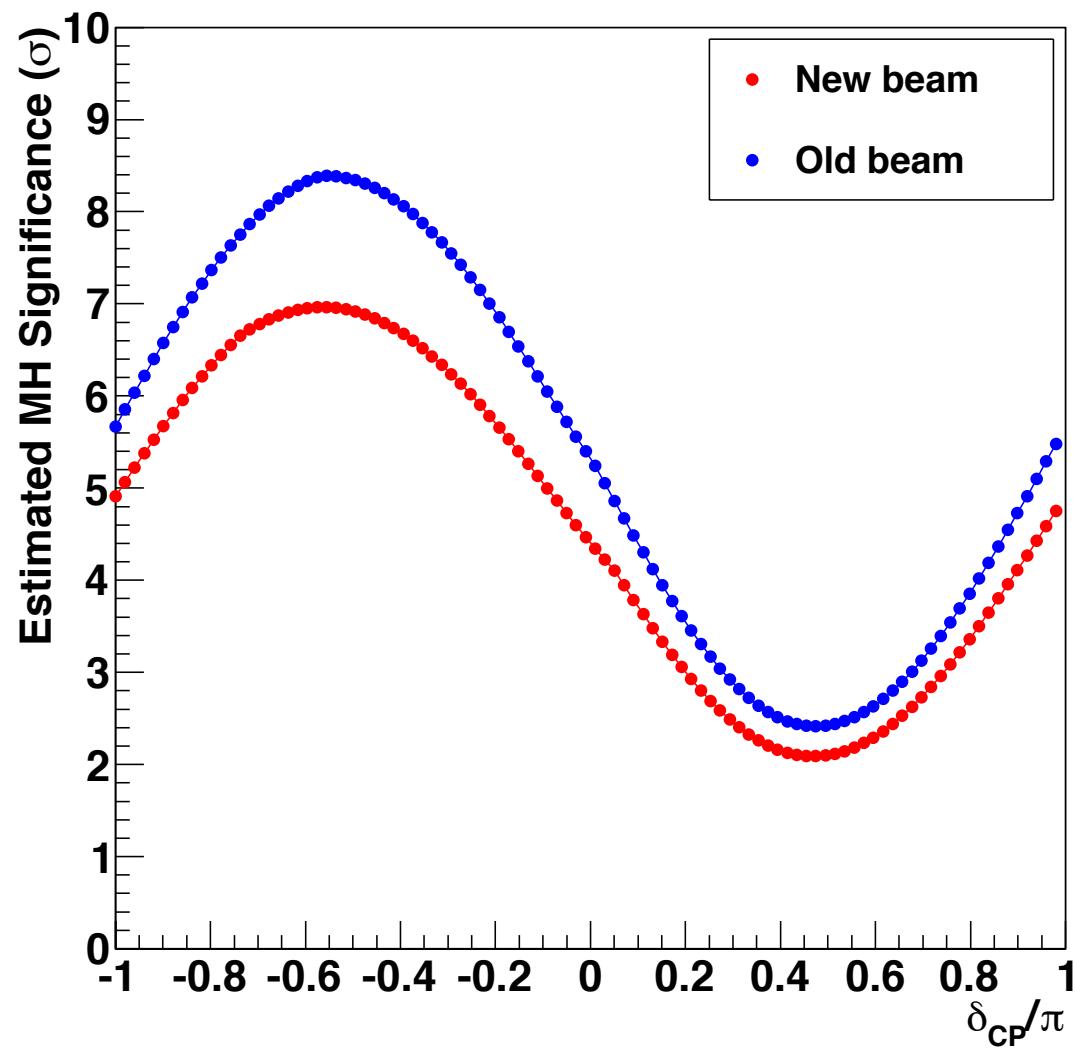


Compare Beams: Δm_{31}^2 vs θ_{23}



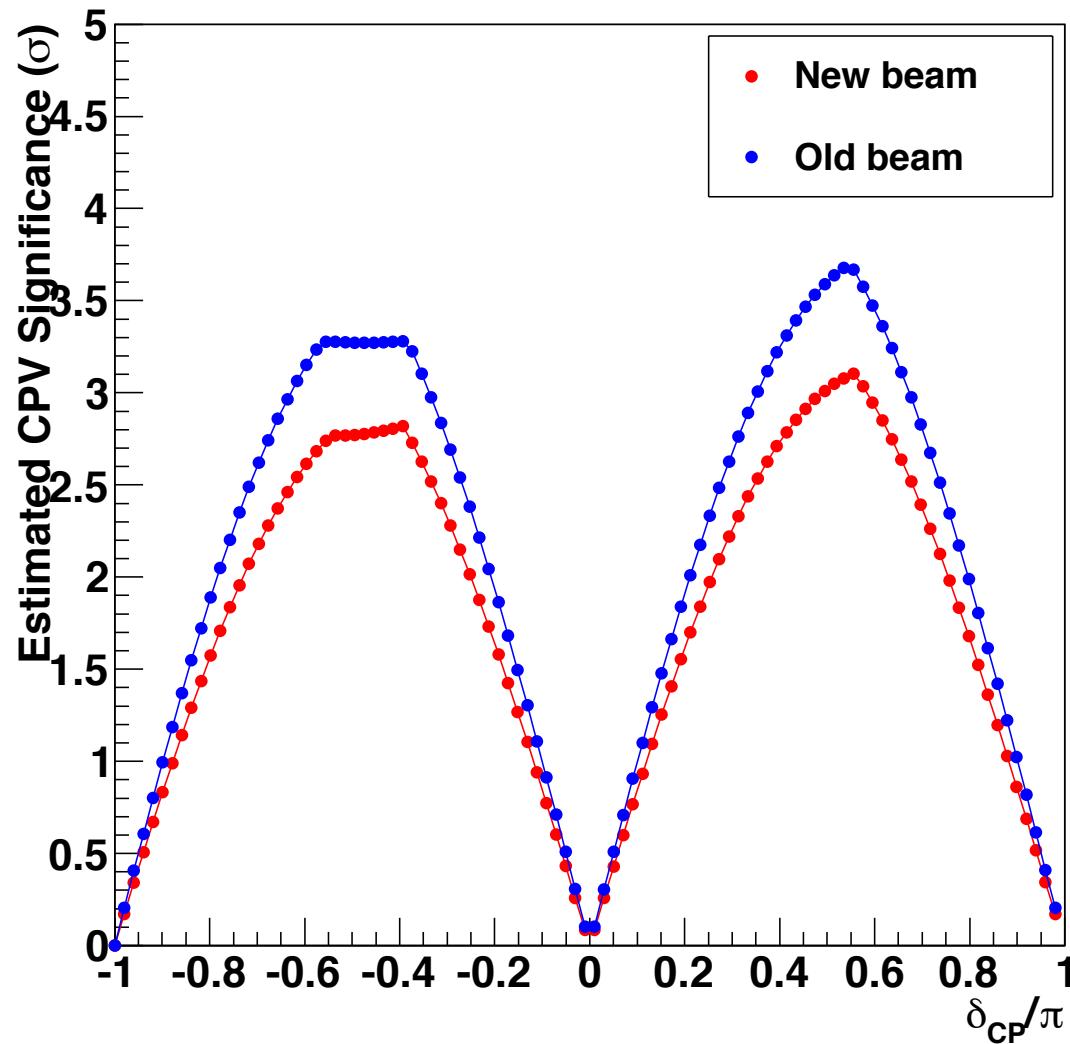
Compare beams: MH

MH Significance vs δ_{CP}

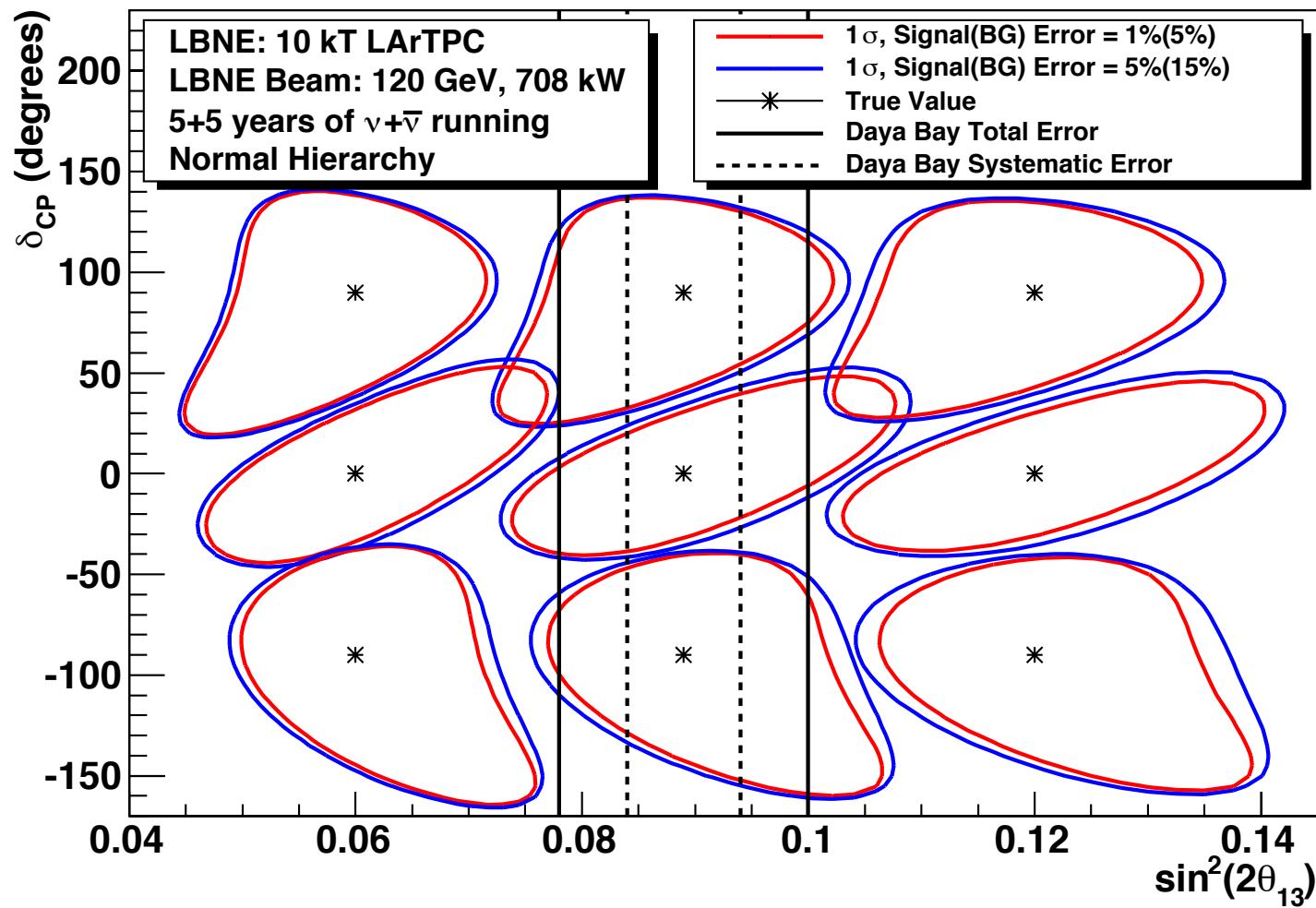


Compare beams: CPV

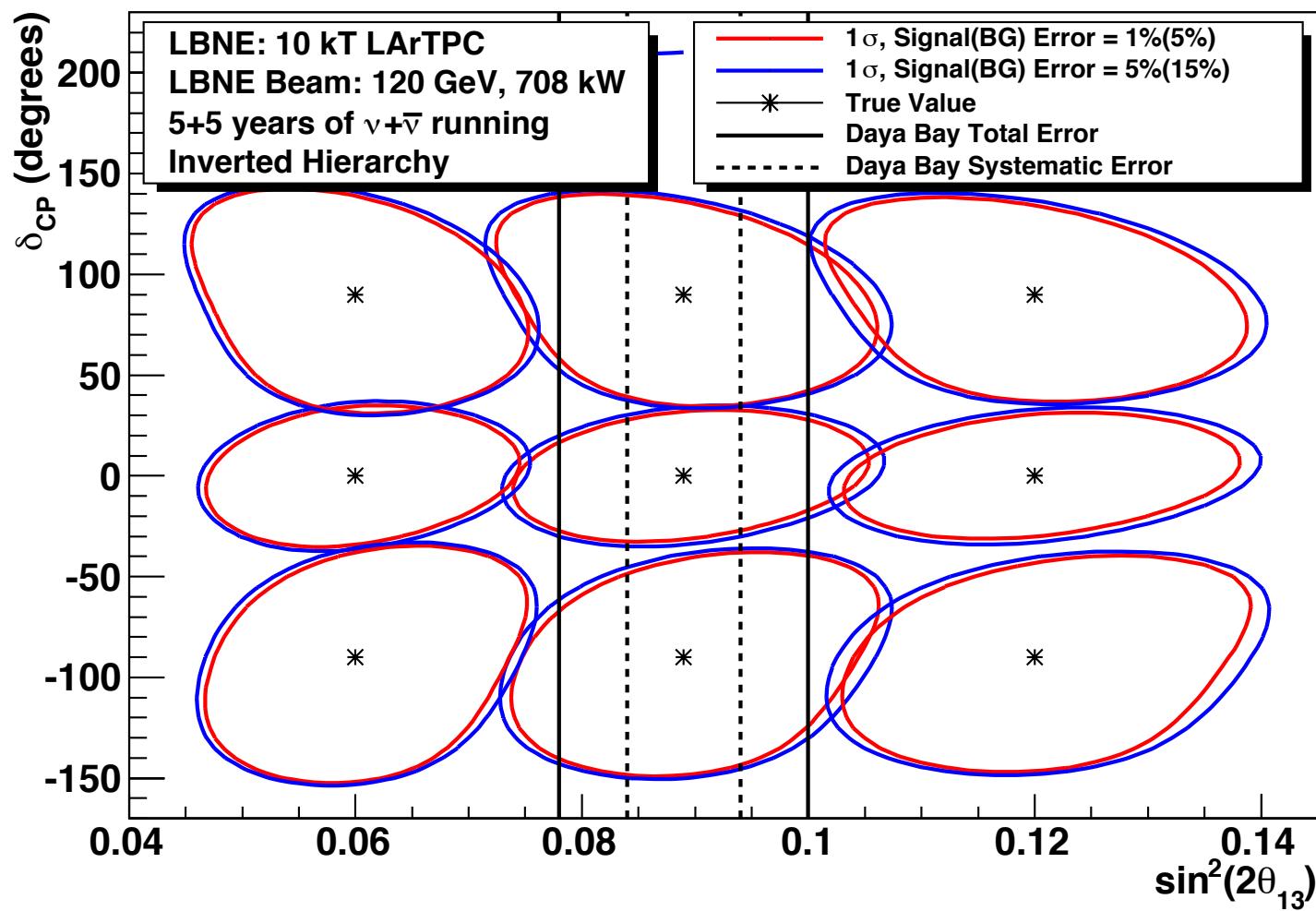
CPV Significance vs δ_{CP}



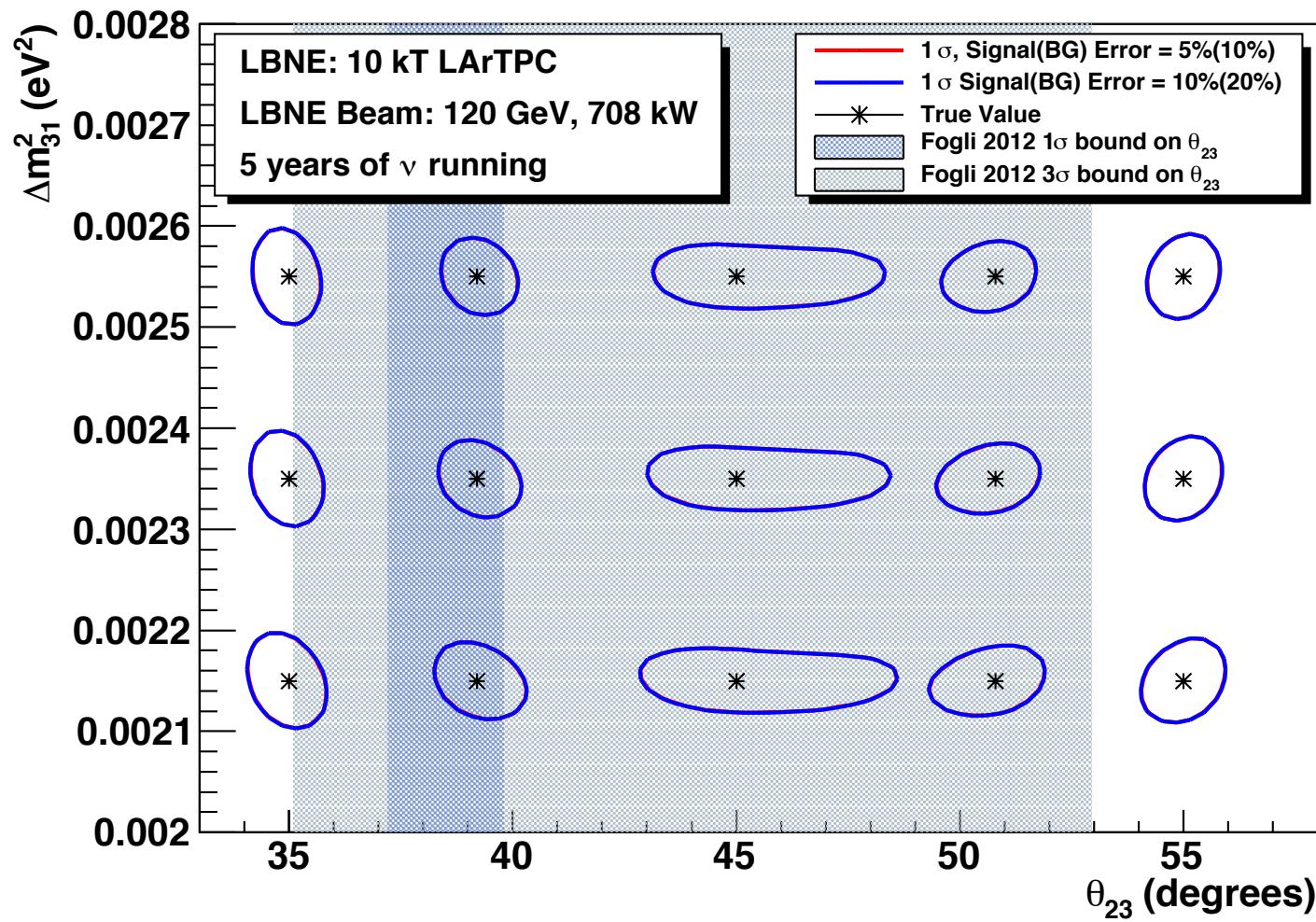
Current beam: δ_{CP} vs $\sin^2(2\theta_{13})$



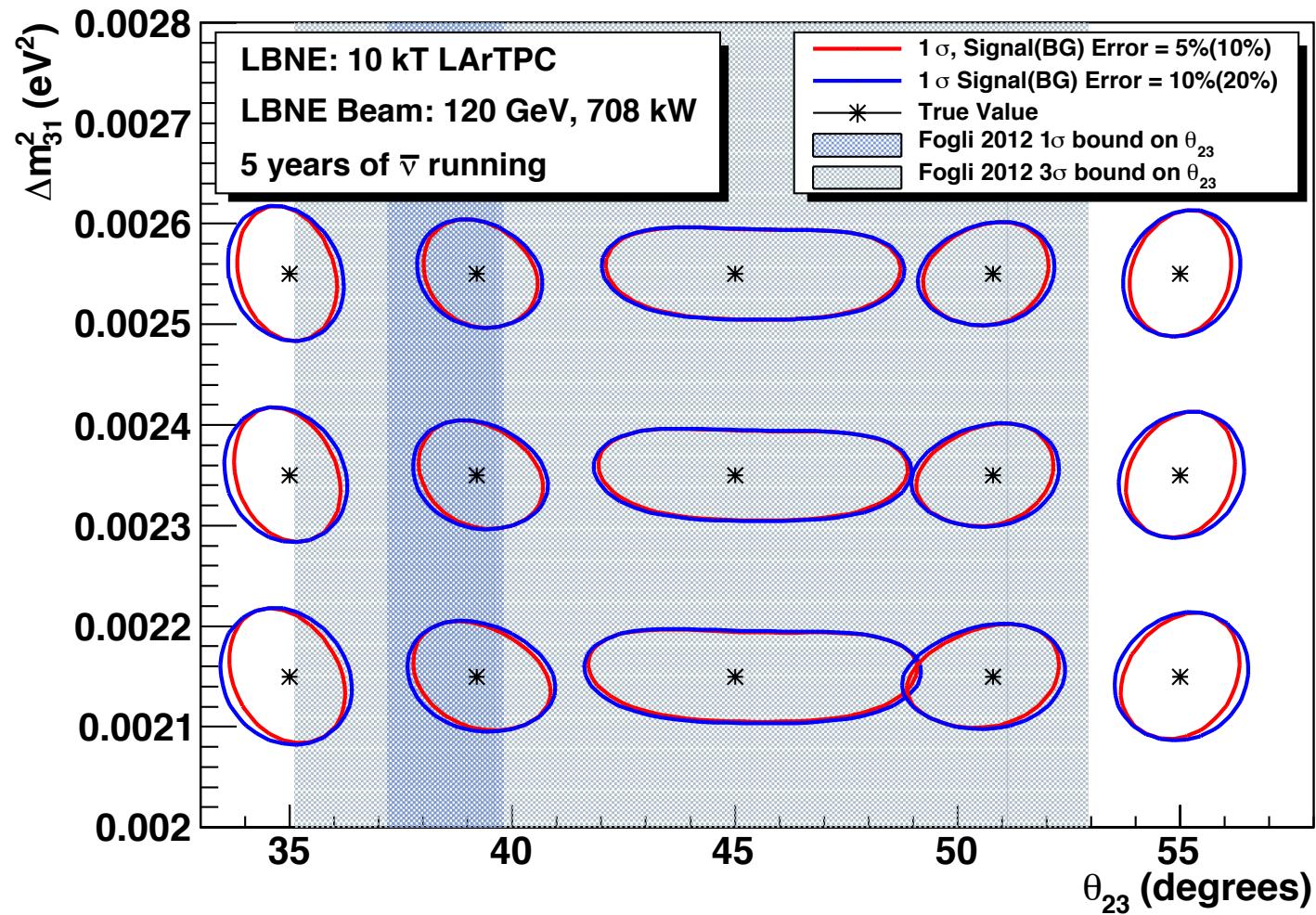
Current beam: δ_{CP} vs $\sin^2(2\theta_{13})$



Current beam: Δm_{31}^2 vs θ_{23}



Current beam: Δm_{31}^2 vs θ_{23}



Current Beam: Resolutions

Parameter		Resolution (1σ)
δ_{CP}	$\delta_{CP}=0$	21.1°
	$\delta_{CP}=90$	34.8°
	$\delta_{CP}=-90$	40.1°
$\sin^2(2\theta_{13})$	$\delta_{CP}=0$	0.011
	$\delta_{CP}=\pm 90$	0.010
θ_{23}	neutrinos	0.7°
	antineutrinos	1.0°
Δm_{31}^2	neutrinos	$2.4 \times 10^{-5} \text{ eV}^2$
	antineutrinos	$3.4 \times 10^{-5} \text{ eV}^2$